

Properties

Commutative Property $A \cup B = B \cup A$
 $A \cap B = B \cap A$

Associative Property $(A \cup B) \cup C = A \cup (B \cup C)$
 $(A \cap B) \cap C = A \cap (B \cap C)$

Identity $A \cup \emptyset = A$
 $A \cap U = A$

Complement $\sim U = \emptyset$

Distributive Property $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$
 $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$